



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

the mountain. Of these the more important were the general climatology of Mount Rose, the relation of climate to the plant environment, the relation of timber to the conservation of snow, and the frost forecasting from the summit. With such a record for its short life, and with ambitious plans for the future, progress is certain to be the result. Having recently been assured of further support by the office of experiment stations of the national government, the zealous workers are almost certain to produce results which will be of great value to meteorology in general and to the agricultural interests of the Great Basin in particular.

ANDREW H. PALMER

BLUE HILL OBSERVATORY,
HYDE PARK, MASS.

CONCERNING THE DATE OF THE LAMARCK MANUSCRIPT AT HARVARD

A CURIOUS mistake has found its way into M. Landrieu's "Life of Lamarck" regarding the probable date of the Harvard manuscript to which I referred in the March number of the *American Naturalist*. In this article I had stated that the "Manuscripts de Lamarck" were "*brought together* in a volume, the binding dating 1830-40," and that in this little volume there was "a table of contents, probably in the hand of the *early owner* [this does not mean the *author*] of the manuscript." Also that "it will be noted that the papers were *collected* before 1835, the year of the appearance of the second edition of the '*Animaux sans Vertèbres*,'" because in the table of contents, referred to above as "in the hand of the *early owner*" "it is stated that the drawings *will form* part of the second edition" of that work.

Now M. Landrieu remarks in perfect seriousness that I have given the probable date of the *writing* of the manuscript "as before 1835," at which time, as he notes, "Lamarck had been dead six years, after ten years of total blindness!" So I must now smilingly protest that I was aware of the date of Lamarck's death, and even when his eyesight failed him—in fact I mentioned the latter

date, as 1818, in the same *Naturalist* paper (p. 148) which my colleague has so imperfectly read. The year 1835 is but a landmark in the Harvard manuscript, since it was at that time or somewhat before that time that its five component parts were brought together in a little volume by the "*early owner*," who may well have been an editor of the second edition of the "*Animaux sans Vertèbres*." If, moreover, my good friend M. Landrieu had interpreted the *Naturalist* paper carefully, he might have discovered that I have given the probable dates of various parts of the Harvard manuscript as prior to 1818, "the year in which Lamarck's eyes failed him." So, after all, M. Landrieu's estimate of the date of these manuscripts and my own do not differ widely. He gives the dates between 1810 and 1820—thus he is even less conservative than myself, for he assumes that Lamarck may have continued to write his papers *propria manu* even after his eyesight failed.

BASHFORD DEAN

SPECIAL ARTICLES

THE INTERFERENCE OF THE REFLECTED DIFFRACTED AND THE DIFFRACTED REFLECTED RAYS OF A PLANE TRANSPARENT GRATING, AND ON AN INTERFEROMETER

If parallel light, falling on the front face of a transparent plane grating, is observed through a telescope after reflection from a rear parallel face the spectrum is frequently found to be intersected by strong vertical interference bands. Almost any type of grating will suffice, including the admirable replicas now available, like those of Mr. Ives. In the latter case one would be inclined to refer the phenomenon to the film and give it no further consideration. On closer inspection, however, it appears that the strongest fringes certainly have a different origin and depend essentially on the reflecting face behind the grating. If, for instance, this face is blurred by attaching a piece of rough wet paper, or by pasting the face of a prism upon it with water, so as to remove most of the reflected light, the fringes all but disappear. If a metal mirror is forced against the rear